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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

SEP 12 2012

Mr. Tracy Helms
Plant Manager
TCI of Alabama, LLC
101 Parkway East
Pell City, Alabama 35125

Dear Mr. Helms:

This letter follows the meeting held on June 19, 2012, between the U.S. Environmental Protection Agency and TCI of Alabama, LLC (TCI) to discuss the status of TCI's polychlorinated biphenyl (PCB) Approval. I hope that the information provided during the meeting and below will address any concerns your customers may have with regard to the status of TCI's approval while the EPA processes TCI's renewal application.

Pursuant to Section 6(e) of the Toxic Substance Control Act and the federal regulations promulgated thereunder, the EPA issued a PCB Approval to TCI for the commercial storage of polychlorinated biphenyls (PCBs) and the decontamination of PCB items. This Approval, originally issued on October 23, 2000, expired on October 23, 2010, however, because TCI submitted a timely notice of intent to continue PCB operations in accordance with Conditions I.E.2 and I.F.1 of the Approval, the Approval remains in full effect until a new Approval is issued by the EPA.

It is the responsibility of TCI to ensure that it is in compliance with all applicable provisions of TSCA and the federal PCB regulations at 40 C.F.R. Part 761. The Approval does not relieve TCI of the responsibility to comply with all other applicable federal, state, and local regulations and ordinances for operation and maintenance of the facility.

If you have any questions about the letter, please contact Terri Crosby-Vega of my staff at (404) 562-8497 or Crosby-vega.terri@epa.gov.

Sincerely,

Jon D. Johnston

Jon D. Johnston, Chief
RCRA Programs and Materials
Management Branch
RCRA Division

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW
ATLANTA, GEORGIA 30303-8909

IN THE MATTER OF:	)	**APPROVAL TO COMMERCIALLY**
TCI OF ALABAMA, LLC	)	**STORE POLYCHLORINATED**
PELL CITY, ALABAMA	)	**BIPHENYLS (PCBs) AND**
	)	**DECONTAMINATE PCB ITEMS**

AUTHORITY

This approval is issued pursuant to Section 6(e) of the Toxic Substances Control Act, Public Law No. 94-469, and the federal regulations promulgated thereunder at 40 CFR Part 761.

BACKGROUND

Section 6(e)(1) of the Toxic Substances Control Act (TSCA) requires that the U.S. Environmental Protection Agency (EPA) promulgate rules for the disposal of PCBs. Rules implementing TSCA Section 6(e) were published in the May 31, 1979, Federal Register (44 FR 31542) and renotified in the May 6, 1982, Federal Register (47 FR 19527). Those rules also regulated the storage of PCB waste prior to disposal under the TSCA Section 6(e)(1) disposal authority for PCBs. Amendments to those rules were published in the December 21, 1989, Federal Register (54 FR 52746). Additional changes to the PCB disposal rules, which were largely de-regulatory in nature, were published in the June 29, 1998, Federal Register (63 FR 35384).

In the late 1980s, Trans-Cycle Industries, Inc., began construction of a facility located in Pell City, Alabama for the disassembly and decontamination of PCB articles, primarily retired electrical equipment. A general overview of the facility may be found in Section I of the Operations Plan, Appendix B of this approval. On August 2, 1990, Trans-Cycle Industries, Inc., submitted to EPA, an approval application for the commercial storage of PCB waste. Thus, Trans-Cycle Industries, Inc., qualified to store PCB waste under an interim approval until EPA completed action on its PCB storage application. In June 1993, Trans-Cycle Industries, Inc., submitted an application for an alternative method of disposal approval (AMDA) for their solvent washing/solvent distillation (SW/SD) process to decontaminate and recycle metals from PCB articles. EPA issued an AMDA to Trans-Cycle Industries, Inc., for their SW/SD process on

May 13, 1995. However, EPA did not issue a commercial storage approval to Trans-Cycle Industries, Inc., when it issued the AMDA and Trans-Cycle Industries, Inc., continued to store PCB waste under interim approval. Prior to expiration of the AMDA in May 1998, Trans-Cycle Industries, Inc., made timely submittal of a request for renewal of the AMDA. Because of pending PCB rule changes EPA deferred action on the AMDA renewal request from Trans-Cycles Industries, Inc. As a result of PCB rule changes promulgated on June 29, 1998, certain decontamination activities, including some of those conducted by Trans-Cycle Industries, Inc., that heretofore required an AMDA, may be authorized under a 40 CFR §761.79(h) alternative decontamination or sampling approval.

On July 8, 1998, Trans-Cycle Industries, Inc., submitted a revised commercial storage application in response to EPA comments. On February 4, 1999, Trans-Cycle Industries. Inc., requested approval for two alternative sampling protocols for decontamination of PCB items. Trans-Cycle Industries, Inc., proposed to continue using the sampling protocol specified in its expired AMDA for its SW/SD decontamination process. Trans-Cycle Industries, Inc., proposed a second sampling protocol to verify decontamination of metal surfaces derived from drained < 500 parts per million (ppm) PCB items that are processed through their aqueous wash (AW) system. After a completeness and technical adequacy review of the revised application and alternative sampling protocols, EPA determined that the applicable regulatory criteria, identified at 40 CFR §761.65(d)(2)(i) through (d)(2)(vii) and 40 §761.79(h) have been satisfied.

On June 22, 2006, a group led by KMOJ Acquisition, LLC notified EPA of its intent to purchase the assets of Trans-Cycle Industries, Inc., and form a new company, TCI of Alabama, LLC (TCI) to operate the Pell City, Alabama facility formerly owned by Trans-Cycle Industries, Inc. The KMOJ Acquisition group requested EPA transfer the PCB storage and PCB item decontamination approval to the new TCI. After review and acceptance of revised closure and financial assurance documents submitted by the new owners, EPA decided to authorized the transfer of the approval. Minor modifications have been made to the approval issued by EPA on October 23, 2000, to reflect the new ownership, including some conforming text changes to approval conditions.

APPLICABLE REGULATIONS

The conditions of this approval were developed in accordance with the applicable requirements of 40 CFR Part 761. The rules for PCB storage facilities are codified at 40 CFR §761.65, "Storage for disposal." Those rules require, among other things, that facilities which store PCB waste generated by others, in quantities greater than 500 gallons, obtain a written approval issued by EPA. 40 CFR §761.79, "Decontamination standards and procedures" establishes decontamination standards and procedures for removing PCBs, which are regulated for disposal, from water, organic liquids, non-porous surfaces (including scrap metal from disassembled electrical equipment), concrete, and non-porous surfaces in contact with non-liquid PCBs.

APPROVAL

Approval is hereby granted to TCI, 101 Parkway East, Pell City, Alabama (EPA ID # ALD 983 167 891), to commercially store and process (disassemble and decontaminate) PCBs and PCB items for disposal, subject to the approval conditions stated herein.

This approval shall become effective on the date that KMOJ Acquisition, LLC and others complete the purchase of Trans-Cycle Industries, Inc., assets and shall expire October 23, 2010, unless revoked, suspended, or terminated in accordance with the approval conditions stated herein.

This approval does not relieve TCI from compliance with all applicable federal, state and local regulatory requirements, including the federal PCB regulations at 40 CFR Part 761, and any amendments or revisions thereto.

Kay T Prince for
Beverly H. Banister
Director
Air, Pesticides, and Toxics
Management Division

1/4/07
Date

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APPROVAL CONDITIONS

I. STANDARD CONDITIONS

A. Effect of Approval

1. TCI may store and process (disassemble and decontaminate) PCBs and PCB items in accordance with these approval conditions and the federal PCB regulations at 40 CFR Part 761. Any storage or processing of PCBs and/or PCB items not in accordance with this approval and/or the PCB regulations is prohibited.

2. Issuance of this approval does not convey property rights of any part or any exclusive privilege, nor does it authorize any injury to persons or property, any invasion of other private rights or any infringement of state or local laws or regulations.

3. Compliance with these approval conditions does not establish a defense to any other law that provides protection from any unreasonable risk to public health and the environment, including the federal PCB regulations at 40 CFR Part 761.

4. This approval does not relieve TCI from compliance with all applicable federal, state and local regulatory requirements, including the federal PCB regulations at 40 CFR Part 761.

B. Severability

The provisions of this approval are severable, and if any provision of this approval or if the application of any provision of this approval is held invalid, the remainder of this approval shall not be affected thereby.

C. Approval Compliance

1. TCI must comply with and operate in accordance with the provisions of the federal PCB regulations at 40 CFR Part 761 and with the approval conditions stated herein.

2. These approval conditions are based on the facts, representations, and certifications made by TCI in its approved, revised storage application dated July 8, 1998, and TCI's application for approval of an alternative sampling protocol dated February 4, 1999. In the event that these approval conditions are inconsistent with the approved application materials, TCI must abide by the approval conditions stated herein.

D. Approval Suspension/Revocation

1. Departure from these approval conditions, the approved application materials or approved modification(s) to this approval, or the federal PCB regulations without the prior written approval of EPA may result in the immediate suspension of this approval

and/or the commencement of proceedings to revoke this approval and/or appropriate enforcement action under any or all applicable statutes and regulations.

2. This approval may be suspended or revoked at any time by EPA when it has reason to believe that the continued operation of this facility presents an unreasonable risk to human health or the environment.

E. Approval Expiration and Continuation

1. This approval to commercially store, and process PCBs and PCB items shall expire on October 23, 2010.

2. This approval and its conditions herein will remain in effect beyond the approval expiration date if TCI has submitted a timely, complete and adequate notice of intent to continue the approval and, through no fault of TCI, EPA has not issued an approval renewal.

F. Approval Renewal

1. To continue the PCB storage and processing activities granted by this approval after the expiration date of this approval, TCI must notify EPA by written notice of intention to continue the approval at least 180 days, but not more than 270 days prior to the expiration date of this approval.

2. EPA may require TCI to submit additional information in connection with the renewal of this approval. EPA shall review the submitted information and determine if this approval is to be renewed.

G. Approval Modification

1. TCI shall notify EPA in writing of any intended modification of this approval or TCI's approved application.

2. A "major modification" is defined as any change to the structural design of the storage areas, the maximum PCB storage inventory, changes to the sampling methods to verify decontamination specified herein, closure plan changes, or any other changes which affect overall performance or environmental impact. A major modification to this approval or the final application shall be made only upon the written approval of the EPA Regional Administrator or his/her designee.

3. A "minor modification" is defined as administrative and informational changes, correction to typographical errors, changes to conform with agency guidance or regulations, or any other change which does not affect overall performance or

environmental impact. A minor modification to this approval or the application shall be made upon the written concurrence of the Pesticides and Toxic Substances Branch Chief of EPA, Region 4.

H. Entry and Inspection

TCI shall allow EPA authorized representative(s) to, at reasonable times:

1. Inspect TCI's property to determine compliance with this approval or the federal PCB regulations;

2. Inspect any records that must be kept relative to this approval or the federal PCB regulations;

3. Take sample(s) for the purpose of assessing compliance with this approval or the federal PCB regulations; and

4. Inspect TCI's activities relative to this approval or the federal PCB regulations.

I. Change in Ownership

1. The EPA will recognize the transfer of this approval to a new owner/operator if all of the following conditions are met:

a.. The transferee demonstrates it has established financial assurance for closure of the facility pursuant to 40 CFR §761.65(g);

b. TCI must maintain its financial assurance for closure until EPA transfers this approval, so that there will be no lapse in financial assurance for closure of the transferred facility;

c. The transferee submits new approval application materials for PCB commercial storage and PCB Item decontamination, including all or some of the elements listed in 40 CFR §761.65(d), as determined by EPA;

d. The transferee resolves any deficiencies EPA has identified in its application; and

e. The transferee submits a signed and notarized affidavit which states that the transferee shall comply with all the terms and conditions of this approval.

2. Failure by TCI or the transferee to comply with any of the provisions of this condition shall render this approval null and void.

J. Inapplicability of Paperwork Reduction Act

Any and all information required to be maintained or submitted pursuant to this approval is not subject to the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq., because it is information collected by EPA from a specific individual or entity for the purpose of assuring compliance with this approval.

II. GENERAL FACILITY CONDITIONS

A. Facility Operation, Limitation of Exposure and Control of Releases

1. TCI shall maintain and operate the facility to prevent fire, explosion, or releases of PCBs to air, soil, ground water or surface water.

2. All processing (disassembly and decontamination) of PCB items shall be conducted within TCI's building. Fugitive vapor and particulate emission control systems designed and operated to prevent or limit releases of PCBs and volatile organic chemicals to the air shall be maintained in proper working order.

3. Any cutting tool or other device used in processing PCB items must be operated in a manner to prevent heating of the material which may result in the vaporization of PCBs and the subsequent uncontrolled entry of PCBs to the environment.

a. TCI shall not use a cutting torch or other thermal methods to cut PCB contaminated metal unless the unit being cut is first decontaminated to meet 40 CFR §761.79(b)(3)(i)(A); or

b. TCI shall conduct a demonstration test to prove to EPA's satisfaction that TCI can effectively trap and remove particulate and volatilized PCBs emissions generated from torch cutting PCB contaminated metal surfaces. Any such testing or subsequent operational use of a cutting torch on PCB contaminated surfaces requires EPA's prior written approval.

4. In order to prevent release of PCBs to the environment and maintain a safe working environment, TCI shall follow the housekeeping and spill cleanup procedures outlined in Section V of the facility Operations Plan (Appendix B).

B. Security

The facility must be secured to restrict public access.

C. Personnel Training

1. TCI shall ensure through documented training, that personnel, who are directly involved with handling PCBs and PCB items, are familiar with the requirements of this approval, and regulatory requirements under 40 CFR Part 761 as they relate to specific job tasks.

2. Training for new employees involved with managing PCBs shall be completed within 30 days of employment.

D. Safety and Health

1. TCI employees participating in decontamination activities involving ≥ 50 ppm PCB items shall wear or use protective clothing or equipment to protect against dermal contact or inhalation of PCBs or material containing PCBs.

2. TCI shall comply with all applicable health and safety standards, as required by federal, state and local regulations and ordinances.

3. Those injuries or illnesses directly related to PCB exposure must be reported to the EPA, Region 4 Toxic Substances Section at (404) 562-8977.

E. Spills

1. TCI shall generally adhere to the spill prevention measures outlined in the Spill Prevention Control and Countermeasure (SPCC) Plan prepared by Trans-Cycle Industries, Inc dated July 1998. TCI shall implement applicable control measures specified in the SPCC for qualifying spill events.

2. Releases of PCBs to the environment (i.e., spills or releases of PCBs that occur outside of TCI's building) shall be cleaned up in accordance with the requirements of the PCB Spill Cleanup Policy at 40 CFR 761 Subpart G or 40 CFR §761.61, as applicable.

3. TCI shall comply with applicable PCB spill reporting requirements under the Clean Water Act and the Comprehensive Environmental Response Compensation and Liability Act.

4. Releases or spills of ten (10) pounds or more of pure PCBs and PCB releases or spills in any amount which pose a potential for significant exposure to humans, animals, or the environment, shall be reported to the EPA, Region 4 Toxic Substances Section at (404) 562-8990, or Emergency Response Section at (404) 562-8700. A written summary report about a reportable spill incident, as identified in this paragraph, must be submitted to EPA within five (5) business days following the incident. When EPA requests a detailed report on the incident, this report shall be submitted to EPA within fifteen (15) business days following the request. The detailed report shall include, but not be limited to, a description of the spill, cleanup activities, and changes in the TCI operations to prevent such spills in the future.

5. Any debris, solid wastes or liquid wastes generated as a result of clean up or decontamination of a PCB spill or release shall be disposed of in accordance with §761.61.

F. Recordkeeping and Reporting

1. All reports and other information requested by EPA shall be signed by the facility manager or his designated representative.

2. TCI must record the 30 day inspections required by Condition III. H.2 of this approval, in an inspection log or summary. These inspection records must be kept for at least three years after the facility is no longer used for storage of PCBs and made available to EPA upon request.

3. TCI shall prepare and maintain all other records and documents, including annual records, annual document logs and annual reports as required by 40 CFR §761.180(b).

4. TCI shall retain all records required by this approval or the federal PCB regulations at 40 CFR Part 761 during the course of any unresolved enforcement action regarding the facility or upon request by EPA, notwithstanding any other provision of this approval or the federal PCB regulations at 40 CFR Part 761.

G. Closure and Financial Assurance

1. The revised closure plan for the Pell City, Alabama facility dated August 2006, is the approved closure plan. TCI shall submit a written request to modify the approved closure plan whenever any of the conditions listed in 40 CFR §761.65(e)(4) arise.

2. TCI has filed with EPA a closure cost estimate for the Pell City, Alabama facility that satisfies the requirements of 40 CFR §761.65(f)(1). TCI shall annually adjust the closure cost estimate as required by 40 CFR §761.65(f)(2) and submit a copy of the adjusted closure cost estimate to EPA Region 4 no later than the anniversary date of the establishment of the financial assurance instrument(s) used to demonstrate financial assurance for closure.

3. TCI has demonstrated financial assurance for closure of the Pell City, Alabama facility as required by 40 CFR §761.65(g). TCI shall maintain financial assurance for facility closure in accordance with 40 CFR §761.65(g) and make necessary adjustments whenever necessary to reflect changes to the closure cost estimate. The type of financial assurance mechanism used by TCI may be modified with prior written approval from EPA.

4. When an EPA approved modification to the facility's closure plan increases the cost of closure, TCI shall revise the closure cost estimate and the financial assurance mechanism, if applicable, no later than thirty (30) days after the modification is approved.

5. TCI shall keep a copy of the current closure plan, closure cost estimate and financial assurance document(s) at the facility and make such documents available to EPA inspectors for review, upon request.

III. PCB STORAGE MANAGEMENT

A. Approved PCB Storage Area

The approved PCB storage area is the combined total 59,078 square foot, curbed and lined area of the TCI building, depicted in Figure 1. The approved storage area includes a diked tank farm used for bulk storage of dielectric fluid containing PCBs at concentrations of ≥ 50 ppm and a 5000 gallon steel tank used to store spent solvent containing PCBs at concentrations of ≥ 2 ppm.

B. Types of PCB Storage Allowed

1. TCI is authorized to store PCBs and PCB items in the following configurations:

   a. Intact and non-leaking, drained and undrained PCB electrical equipment and other PCB articles shall be stored free-standing or in PCB article containers;

   b. Partially or fully disassembled, drained PCB electrical equipment and other PCB articles shall be stored free-standing, or in PCB containers;

   c. Leaking PCB articles and PCB equipment shall be stored in PCB containers;

   d. Liquid PCBs shall be stored in PCB containers, dedicated stationary bulk storage tanks or intact and non-leaking articles;

   e. Non-liquid PCBs shall be stored in PCB containers.

2. Any storage of PCBs in a manner not listed in Condition III.B.1 is prohibited.

C. Design Requirements of Storage Area

The PCB storage area as identified in Condition III.A above, shall be maintained in accordance with the requirements of 40 CFR §761.65(b)(1) and as specified in the final revised application.

D. Maximum PCB Storage

TCI is authorized to store no more than the amounts of PCBs and PCB items specified herein:

1. PCB capacitors - 100,000 pounds;

2. Drained and undrained PCB articles - 1,000,000 pounds of equipment holding up to 24,000 gallons of fluid with a PCB concentration of ≥ 500 ppm;

3. Drained and undrained PCB-contaminated articles - 490,000 pounds of equipment holding up to 6,300 gallons of fluid with a PCB concentration of < 500 ppm;

4. PCB liquid containing ≥ 50 ppm PCBs - 24,000 gallons stored in three 8,000 gallon vertical tanks;

5. Cleaning solvent and still bottoms containing ≥ 2 ppm PCBs - 5,000 gallons stored in one tank and/or drums; and

6. Debris - 250,000 pounds containing ≥ 50 ppm PCBs, stored in lined roll-off containers, lined gaylords, and/or drums.

7. Empty PCB containers - 64 contaminated PCB containers.

E. PCB Waste Storage Containers

1. Bulk stationary containers (tanks) used to store spent chlorinated solvents containing ≥ 2 ppm PCBs and dielectric fluid containing ≥ 50 ppm PCBs shall be in compliance with the requirements of 40 CFR §761.65(c)(7).

2. Containers used to store liquid or non-liquid PCB waste destined for disposal at an off-site TSCA approved disposal facility shall comply with the requirements of 40 CFR §761.65(c)(6).

F. Management of Stored PCB Items

1. TCI's storage practices shall generally conform with the procedures outlined in Section II of the facility Operations Plan (Appendix B). TCI may store PCB items in a manner that allows maximum use of space. However, PCB items must be stored in a manner that presents no danger to employees and does not impede routine inspections carried out by TCI, as required by this approval. During compliance inspections conducted by EPA officials or representatives, TCI will move items as requested by the inspector(s) to allow the inspector(s) full access to the facility and stored PCB items.

2. If any PCB container or PCB article is leaking, TCI shall immediately transfer the PCB waste in the container or the PCB article to a properly marked, non-leaking container. Any spilled or leaked materials shall immediately be cleaned up and the materials and residues containing PCBs shall be disposed of in accordance with §761.61.

3. No item of movable equipment that is used for handling PCBs and PCB items in the approved storage area and that comes in direct contact with PCBs shall be removed from the storage area unless it has been decontaminated as specified in 40 CFR §761.79.

G Marking Requirements

TCI shall adhere to the PCB marking provisions specified in Section III of the facility Operations Plan (Appendix B).

H. Inspection Requirements

1. As specified in Section V of the facility Operations Plan (Appendix B), PCB items in storage shall be checked for leaks and spills on a daily basis. TCI need not document the daily (routine) inspections. However, any spills discovered during these routine inspections shall be cleaned up expeditiously, as specified in paragraph 3, below and the cleanup shall be documented as required by 40 CFR §761.180(b)(1)(iii).

2. At least once every 30 days, as required by 40 CFR §761.65(c)(5), TCI shall conduct a thorough inspection of the entire storage facility. TCI shall document the results of the 30 day inspections. The following elements shall be included in the 30 day inspections:

a. PCB items in storage shall be checked for leaks and spills;

b. The PCB liquid storage tanks and the spent solvent storage tank and ancillary equipment (valves, pipelines, etc.,) shall be checked for leaks;

c. The condition of PCB liquid and spent solvent storage tank shells, tank supports, and tank area diking shall be checked;

d. Tank vents, high liquid level alarm systems and liquid level indicators shall be checked;

e. The condition of floor, joints and curbing in the PCB storage area shall be checked; and

f. Spill response and emergency equipment as described in the SPCC Plan, shall be checked and replaced or replenished as necessary.

3. PCB items found leaking on the floor will be moved to a proper containment area and/or transferred to a properly marked non-leaking container and the spill cleaned up within 24 hours of discovery. All debris, solid waste or liquids generated from a spill cleanup shall be disposed of in accordance with §761.61.

4. Any needed repairs noted during such inspections shall be made as expeditiously as possible.

IV. PCB ITEM PROCESSING RESTRICTIONS, CONFIRMATORY SAMPLING PROCEDURES, AND RESIDUE DISPOSAL

A. Processing Restrictions

1. All PCB and PCB-contaminated equipment disassembly and decontamination shall take place within the approved 59,078 square foot, curbed and lined area of the TCI building, depicted in Figure 1. The TCI building is divided into two equipment processing units. Disassembly and decontamination of equipment containing liquids with PCBs at concentrations of $\geq$ 500 ppm shall take place in the 18,878 square foot, steel-lined High Level Shop or within steel pans in the Low Level Shop. Equipment containing < 500 ppm PCB liquid or any concentration of non-liquid PCBs may be disassembled and decontaminated anywhere within the 59,078 square foot, curbed and lined area of the building.

2. The AW system rotary wash unit and wash rack may be used for decontaminating metal surfaces derived from drained PCB-contaminated articles (i.e., metal surfaces previously in contact with liquids containing PCBs at concentrations between 50 - 499 ppm) and shall not be used to decontaminate metal surfaces derived from PCB articles (i.e., metal surfaces previously in contact with liquids containing PCBs at concentrations $\geq$ 500 ppm.

3. When disassembling PCB equipment or articles that may contain residual liquids, TCI shall use absorbent pads, dry granular absorbent or other means, as appropriate, to minimize incidental spills to the floor of the storage and processing areas.

B. Allowable PCB Limits

1. The surfaces of components from items contaminated by PCBs and cleaned by the SW or AW processes shall not have a residual PCB concentration greater than that shown below. Analytical data shall be available to demonstrate that the residual PCB levels do not exceed that in the given requirements. If analytical data is not available, the components must be considered PCB items. For compliance purposes, limits for the materials indicated shall be as follows:

a. Surface contamination based on wipe sampling and extraction of gauze wipe pads(s):

$\leq$10 µg/100 cm^2 - acceptable for unrestricted use;

<100 µg/100 cm^2 - acceptable for disposal in a 40 CFR §761.72(b) compliant smelter.

b. Irregular surfaces and wire nuggets based on extraction of metal(s) sample:

≤ 2 ppm - acceptable for unrestricted use;

< 20 ppm - acceptable for disposal in a 40 CFR §761.72(b) compliant smelter.

2. The solvent used in any SW wash cycle can be temporarily stored in designated tanks for reuse in other intermediate wash cycles or returned directly to the recovery system. Any solvent used as a final wash shall have a PCB concentration of < 50 ppm.

3. Spent solvent from TCI's SW/SD process shall be:

a.. disposed in an incinerator operating in compliance with 40 CFR §761.70;

b. decontaminated in the SD recovery system to a PCB concentration of ≤ 49 ppm for reuse in TCI's SW decontamination process; or

c. decontaminated in the SD recovery system to a PCB concentration of < 2 ppm without further restrictions on disposal or use of the recovered solvent.

4. Process water from the AW system shall be disposed of in accordance with 40 CFR §761.60(a) or §761.79(b)(1).

C. Sampling

To ensure that recoverable metal components have been cleaned to or below the required standard, the appropriate sampling protocol (wipe sample or grab sample) given in Appendix A to this authorization shall be followed and these procedure shall be considered part of the conditions of approval.

D. Analysis

The PCB levels determined for liquid, solid and wipe samples shall be reported as total PCBs calculated by comparison to the relevant Aroclor standards -- i.e., Aroclor 1242, 1248, 1254 and 1260, etc. The analyses of all samples will be in accordance with the methodologies specified in 40 CFR §761.60(g).

E. Final Processing Quality Control

1. The determination of the efficacy of the metal cleaning process for wire and sheet metal components requires analysis of representative, composite wipe samples collected in accordance with Appendix A from every basket or batch processed through the SW or AW cleaning systems. If the concentration or mean concentration, as determined in accordance

with Appendix A, of the metal wipe samples taken from any basket or batch exceeds the maximum limit(s) established in Approval Condition IV.B.1.a, then all metal in the basket or batch will be reprocessed and resampled.

2. Composited wipe samples will also be taken from specific locations on the internal surfaces of individual or randomly selected tanks from processed electrical equipment as more fully described in Appendix A. If PCBs are detected exceeding the maximum limits established in Approval Condition IV. B.1.a, then the entire batch of tanks will be reprocessed and resampled.

3. The determination of the efficacy of the metal cleaning process for irregular (metal) surfaces and wire nuggets requires analysis of composite grab samples collected in accordance with Appendix A from each basket or batch of processed metal. If the mean concentration of the metal samples taken from any basket or batch exceeds the maximum limit established in Approval Condition IV.B.1.b, then all metal in the basket or batch will be reprocessed and resampled.

F. Disposal

1. The disposal of all metal components of a PCB item shall be considered complete only after it has been determined that the residual PCB levels remaining on the "cleaned" surfaces do not exceed the applicable, unrestricted use PCB limits in Approval Condition IV.B.1.

2. All metal components of a PCB item whose "cleaned" surfaces exceed the applicable, unrestricted use PCB limits in Approval Condition IV.B.1, shall be reprocessed to meet the applicable, unrestricted use PCB limits or disposed of in accordance with the requirements of 40 CFR 761 Subpart D.

3. Drained dielectric fluid, containing PCBs at concentrations of 50 ppm or greater, shall be disposed of in a TSCA approved disposal facility, or in the case of drained dielectric fluid which is below 50 ppm PCBs and not as a result of dilution, it may be disposed of as used oil consistent with 40 CFR §761.20(e).

4. All non-recoverable residues generated from dismantling PCB and PCB-contaminated equipment shall be disposed of in a TSCA approved disposal facility. Non-recoverable residues generated from processing large PCB capacitors shall be disposed of in a TSCA approved incinerator. Non-recoverable residuals derived from or meeting the definition of PCB bulk product waste as defined in 40 CFR §761.3, shall be disposed of in accordance with 40 CFR §761.62.

5. No off-site movement of spent or recovered solvent, or still bottoms from the recovery of spent solvent with a concentration of $\geq$ 2 ppm PCBs shall be allowed except for purposes of disposal in a TSCA approved incinerator. Spent solvents or still bottoms

from the recovery of spent solvents that are hazardous wastes as identified in 40 CFR Part 261 must also be managed in accordance with the requirements of the Resource Conservation and Recovery Act.

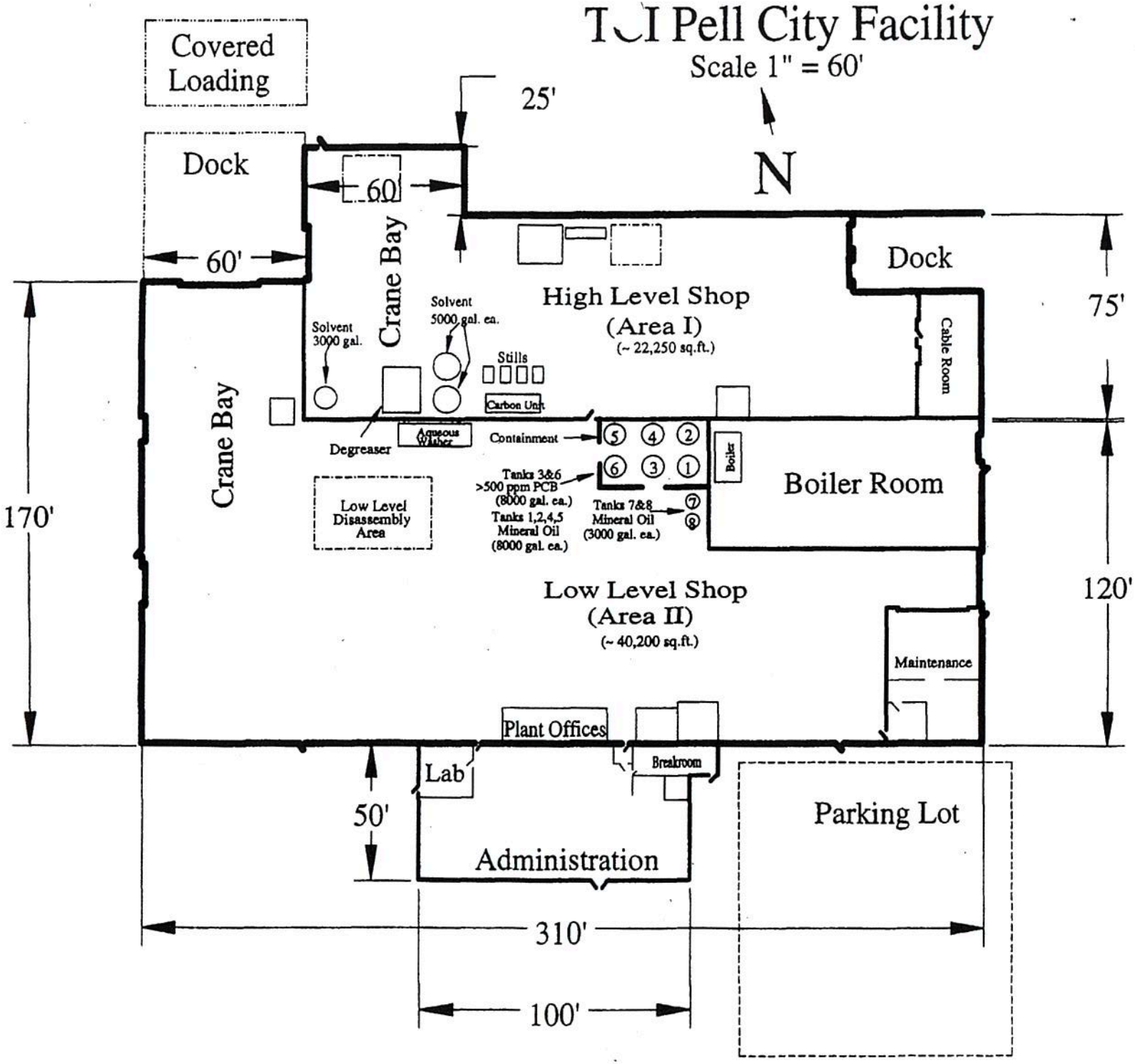
TCI Pell City Facility
Scale 1" = 60'
N
Covered Loading
Dock
60'
25'
60
Crane Bay
Crane Bay
Solvent 3000 gal.
Solvent 5000 gal. ea.
Stills
Carbon Unit
High Level Shop
(Area I)
(~ 22,250 sq.ft.)
Dock
Cable Room
75'
Degreaser
Aqueous Washer
Containment
5 4 2
6 3 1
Boiler
Boiler Room
Tanks 3&6
>500 ppm PCB
(8000 gal. ea.)
Tanks 1,2,4,5
Mineral Oil
(8000 gal. ea.)
Tanks 7&8
Mineral Oil
(3000 gal. ea.)
7
8
Low Level Disassembly Area
170'
Low Level Shop
(Area II)
(~ 40,200 sq.ft.)
120'
Maintenance
Plant Offices
Breakroom
Lab
50'
Administration
Parking Lot
310'
100'

Figure 1

APPENDIX A
PCB SAMPLING PROTOCOL

PURPOSE

Following the completed processing and cleaning of PCB item components, wipe samples shall be taken in the prescribed manner from specific locations, composited and analyzed to assure that surfaces of components of the unit have been cleaned to the allowable PCB limits specified in Section IV of the approval. Likewise, samples of irregular surfaces/metals fines (less than three quarters of an inch in diameter) and wire nuggets must be collected and tested as prescribed herein for comparison to the approval specified PCB limits. If PCB limits are exceeded, every questionable item and the entire contents of a batch, basket or platform, containing a "dirty" piece of wire or lamination shall be reprocessed and retested until acceptable results are achieved.

METHOD

A. Protective Gloves

Protective gloves (e.g., nitirile or vinyl gloves) will be used during all testing procedures. Gloves will be changed after each wipe sample is taken. Used gloves will be disposed of in accordance with 40 CFR §761.61(a)(5)(v).

B. Marking the Wipe Area

1. A disposable template, representing a 100 cm^2 area, shall be used to mark a planar surface on the item designated for testing. The template is to be used only once, and then disposed as PCB waste.

2. The length of wire representing an area equivalent to 100 cm^2 shall be marked; the appropriate wire length can be determined from the contribution to the total area by the total surface of a length of wire considering its dimensions.

3. The area of a bushing representing a 100 cm^2 should be marked by tape or other device.

C. The Wipe Sampling

1. PCB items with flat or curved planar surfaces

a. The area framed by a template should be wiped with uniform and steady pressure.

b. The wiped area is to be wiped in rows in one direction from top to bottom with

eight (8) sweeps covering the entire area.

c. The gauze pad will then be carefully opened and refolded to expose fresh gauze surface.

d. The wiping is repeated in the same fashion from left to right so that the entire framed area is wiped twice.

2. Wire

a. The length of wiring representing an area of 100 cm^2 should be wiped with uniform and steady pressure.

b. The wire should be wiped by drawing the wire back and forth eight (8) times between a wipe which completely surrounds and contacts all surfaces on the wire.

c. The gauze pad will then be carefully opened and refolded to expose fresh gauze surface.

d. The wiping is repeated in the same fashion so that the appropriate length of wire is wiped twice.

D. Compositing of Wipe Samples

1. The wipe sample: one gauze pad shall be used for each 100 cm^2 area to be sampled.

2. Large individual PCB item tanks handled by crane

a. One analytical set of composited wipe samples shall be taken from each large PCB item tank.

b. Five (5) individual wipes from locations specified below in E(1) shall comprise one analytical set.

3. PCB item tanks (e.g., transformer carcasses, capacitor tanks, metal drums) having a fluid capacity greater than 10 gallons placed on a SW system platform

a. One analytical set of composited wipe samples shall be taken from every PCB item tank that is sampled. TCI shall randomly select the greater of 10% of the tanks in a batch or two (2) tanks from each batch of processed tanks.

b. Five (5) individual wipes from locations specified below in E(1) shall comprise one (1) analytical set.

4. PCB item tank capacitors having a fluid capacity less than 10 gallons

a. TCI shall take individual wipe samples from 10% of the capacitor tanks from each batch processed. TCI shall randomly select the capacitor tanks in each batch to sample.

b. Notwithstanding anything in the preceding subparagraph a to the contrary, TCI shall take no less than two composited analytical sets of wipe samples for each batch processed.

c. Each analytical set shall consist of four (4) individual wipes collected from the following inner surface areas:

- side wall
- bottom tank surface
- weld/joint seam
- side wall corner

5. Wires, laminations, and other components of PCB items in baskets

a. Two (2) sets of composited wipe samples shall be taken from six (6) items randomly selected from every basket processed.

b. Three (3) individual wipes shall comprise one analytical set.

6. Frame steel, lids, and steel laminates in the AW system rotary wash unit

a. Samples for wipe testing shall be collected at a rate of one analytical set per batch of material processed.

b. The amount of material which is processed through the rotary wash unit within a 24 hour period, not to exceed 15,000 pounds, is designated as one batch.

c. Five (5) individual wipes shall comprise one analytical set.

7. PCB contaminated item tanks (e.g., transformer carcasses, capacitor tanks, metal drums) having a fluid capacity greater than 10 gallons placed on the AW system wash rack

a. One analytical set of composited wipe samples shall be taken from every PCB item tank that is sampled. TCI shall randomly select the greater of 10% of the tanks in a batch or two (2) tanks from each batch of processed tanks.

b. Five (5) individual wipes from locations specified below in E(1) shall comprise one (1) analytical set.

E. Sampling Locations

1. PCB item tank

a. The five (5) areas on the inner surfaces to be wipe sampled, shall when present, include the following:

- flat surface adjacent to or below a fin port;
- side wall opposite a drain hole;
- weld joint/seam;
- bottom tank surface; and
- interior of fin.

b. If there are no fins, TCI shall sample other relevant areas, not to total less than five (5) wipes per tank.

2. Wires, laminations, and other components of PCB items in baskets

a. Samples for wipe testing shall be collected from storage containers (e.g., hoppers gaylord boxes) after processed materials are transfered to the containers from the wash baskets.

b. Samples for each analytical set shall be collected from three (3) locations within each storage container holding the contents of an individual basket of processed components. Sample location shall be determined by dividing the upper surface of the container into nine equal rectangular or square areas, numbering the nine squares, then randomly selecting 3 squares from which to pull samples for testing.

c. The surfaces on the wires and laminations selected in accordance with the preceding paragraph that are to be wiped sampled, shall be of sufficient size or length to provide the required 100 cm^2.

3. Frame steel, lids, and steel laminates processed in the rotary wash unit

a. For each large bulk storage container holding an individual batch of processed components, samples for each analytical set shall be collected from five locations

within the container. Sample location shall be determined by dividing the upper surface of the container into ten equal rectangular or square areas, numbering the ten squares, then randomly selecting five squares from which to pull samples for testing.

b. When multiple smaller storage containers are used to store a batch of cleaned metal components, each analytical set shall be collected by taking one representative sample from each of five randomly selected containers in the batch.

c. The surfaces on the metal items selected in accordance with the preceding paragraph, that are to be wiped sampled, shall be of sufficient size to provide the required 100 cm^2.

F. Sample Collection

1. Each set of individual wipes (i.e., 3 - 5 gauze pads) are to be combined in the same sample container to create one (1) analytical sample representative of the test area.

2. The container should be of sufficient size to accommodate the wipes comprising the set and should also serve as the container in which the solvent extraction of PCBs can readily be carried out prior to analysis.

G. Irregular Surfaces/Metal Fines (less than three quarters of an inch in diameter) and Wire Nuggets

1. Two (2) composited samples shall be taken from each basket of material processed.

2. Three (3) grab samples shall comprise one (1) composite sample or analytical set.

3. Samples for each analytical set shall be collected from three (3) locations within each storage container holding the contents of an individual basket of processed components. Sample location shall be determined by dividing the upper surface of the container into nine equal rectangular or square areas, numbering the nine squares, then randomly selecting 3 squares from which to pull samples for testing.

H. Analysis

1. Each analytical set shall be analyzed separately.

2. The gauze pads used for wipe sampling shall be extracted and the extract shall be analyzed using a gas chromatographic method.

3. Samples of metal fines and wire nuggets shall be extracted and the extract shall be analyzed using a gas chromatographic method.

I. Application of Analytical Results

1. When one (1) analytical set is collected, as in the case of a single large tank or a batch of AW system rotary wash processed material, the PCB concentration reported for the individual analytical set will be used to determine the residual PCBs remaining on the surface of the processed PCB item component(s).

2. When two (2) or more analytical sets are collected, TCI shall use the average PCB concentration reported for the analytical sets to determine the residual PCBs remaining on the surface of the processed PCB item component(s).

Appendix B

TCI of Alabama, LLC
Operations Plan
Pell City, AL Facility

TCI of Alabama, LLC
Operations Plan

Section

Attachment

Section I - *General Overview of the Facility*

TCI of Alabama, LLC (TCI) stores and processes (disassembles and decontaminates) transformers, capacitors, mining equipment, heat transfer systems, hydraulic systems, bushings, electromagnets, voltage regulators, switches, pipes, air compressors, compressed air receiver tanks, circuit breakers, reclosers, cable, wire nuggets, sheet metal, and other non-porous metallic surfaces of all polychlorinated biphenyl (PCB) contamination levels at its Pell City, Alabama facility. The purpose of the facility is to recover components (metals) from obsolete electrical equipment thus minimizing waste through recycling. In addition, TCI also acts as a transfer facility for non-recyclable waste (i.e. debris, wood, soil, oil, water, etc.) contaminated by PCBs. Waste is received, consolidated, then shipped offsite for final disposal.

Upon receipt at the facility, items contaminated by 50 parts per million (ppm) PCBs or greater are:

- inspected for conformance with the accompanying manifest and/or shipping papers;
- assigned a unique TCI tracking number; and
- staged for fluid removal and/or disassembly.

During disassembly items are separated into recoverable metals and non-recoverable materials. Recovered metals are decontaminated in accordance with 40 CFR §761.79(h). Following testing to verify cleanliness of <10 µg of PCBs/100 cm^2, cleaned metals are shipped for recycling. Two proprietary processes developed specifically by TCI decontaminate all recovered metals.

Non-recoverable solid material contaminated by PCBs is bulked into containers and shipped offsite for proper disposal at a TSCA approved facility. Fluid greater than or equal to 50 ppm PCBs is bulked into tanks and shipped offsite for proper disposal at a TSCA approved facility. Fluid containing <50 ppm PCBs can be burned onsite for energy recovery or shipped offsite to an approved disposal facility.

For ease of identification and location, Figure 1of this approval displays a schematic overview of the facility showing areas of the facility where storage and processing occur.

Section II - *Storage of Items*

TCI will store items in a manner that allows maximum use of space and presents no danger to the employees or release to the environment. Main aisles of the facility will be kept clear for easy movement of mobile equipment and personnel. In the event of an inspection for compliance by EPA officials or representatives, items which require a PCB label and date removed from service that can not be easily viewed will be removed from their storage location so labels and date removed from service can be seen.

Drummed waste (liquid, solid, or sludge) will be stored in a safe manner and will not be stacked more than two drums high. Empty drums however can be stacked over two drums high. Manufacturer's specifications will be used in determining how high other containers may be stacked.

To minimize exposure to PCBs open topped drummed waste will be opened in order to verify contents. This will include removing the ring of the drum and its top. Once the contents have been verified the top will be placed over the drum until further processing or consolidation occurs.

TCI has the following dedicated storage locations/types:

- hazardous waste still bottoms generated from its cleaning process;
- tankfarm used to store fluids (all PCB levels);
- containers used to store bulk solids and liquids produced in daily operations (i.e. roll-offs, dump trailers, accumulation tanks, drums, hoppers, boxes, portable tanks, vacuum tanks or other similar containers).

Section III - *Marking of Items*

Within TCI's facility storage and processing of PCB items can occur within the same area. Therefore TCI will observe the following practices when marking PCB item.

- PCB labels will be placed at each entrance into the facility where PCBs are either in storage or in process.
- Containers use to accumulate PCB waste (i.e. hoppers, accumulation tanks, waste containers, etc) will not be required to have a PCB label or a start of accumulation date. These containers will be emptied into bulk containers (i.e. roll-offs, dump trailers, tanks, etc.) each day of operation. The bulk containers however will be required to have a PCB label as well as a start of accumulation date.
- Except as noted below, containers and articles in Area 1 of Figure 1 will require no PCB labels since the area is solely dedicated to processing of PCB items.
- Labels will not be required for items or containers of items that have begun the process of disassembly (i.e. core boxes).
- PCB labels and start of accumulation dates will be required on still bottoms containers located in the Hazardous Waste Storage Area located in Area 1.
- Items in storage for disposal located in Area 2 of Figure 1 will be marked as required by 40 CFR §761.40. Items are considered in storage if processing has not begun.

Section IV - *Processing of Items*

TCI has the following dedicated processing locations:

- Area 1 of Figure 1.

TCI also has areas of the facility located within Area 2 of Figure 1 in which both processing and storage can occur. Items will be stored in these areas until ready for processing.

Section V - *House Keeping and Spill Cleanup*

TCI shall maintain and operate the facility to prevent release of PCBs to the environment and reduce PCB exposure to its employees. Routine processing of items can lead to potential leaks and spills; therefore TCI understands the importance of good housekeeping practices.

Concrete throughways of the facility will be scrubbed with a detergent once each workday. In the event scrubbing equipment breaks down, TCI will make every effort to return the equipment to working order as soon as possible. Scrubbing will resume when the equipment is repaired. Processing areas will be cleaned on an ongoing basis as needed to ensure a clean and safe work area. All debris, solid waste or liquid generated from a process area cleanup will be disposed of in accordance with PCB disposal regulation covered under 40 CFR 761 Subpart D.

Items in storage within the facility will be continually checked for leaks and spills. Items found leaking onto the floor will be moved to a proper containment area and/or container and the spill cleaned up within 24 hours of discovery. Any spill cleanups shall be documented as required by 40 CFR §761.180(b)(1)(iii).

Leaks and small spills that occur inside TCI's facility will be cleaned up utilizing the following procedure. Initially, absorbent will be used to absorb freestanding liquids and minimize the contaminated area. Care should be taken in determining the spill boundaries in order to insure the cleaning process removes all the contamination. The initial covering of absorbent will be removed before cleaning the floor surface. This will be followed up with a double wash and double rinse of the contaminated area with a suitable solvent. The contaminated area will be scrubbed to facilitate the cleaning process. Absorbent will be used between washings to absorb any liquids, PCB or remaining solvent from the contaminated area. All debris, solid waste or liquid generated from a spill cleanup will be disposed of in accordance with PCB disposal regulations at 40 CFR 761 Subpart D

As required by 40 CFR §761.65, TCI will document once every 30 days inspections of storage areas and any corrective actions taken if needed. For releases of PCBs to the environment that occur outside of TCI's building, TCI will operate in compliance with all requirements of the PCB Spill Cleanup Policy at 40 CFR 761 Subpart G.